Amendments to the Specification:

Please replace the paragraph beginning on page 5, line 28 through page 6, line 21 with the following amended paragraph:

Antennas are arranged in a first concentric ring in a first orthogonal plane of the longitudinal axis of the site. Antennas can also be arranged in a second concentric ring in a second orthogonal plane of the longitudinal axis of the site, the second concentric ring having a larger diameter than the first concentric ring. Using two concentric rings has the advantage that sectorization can be very ~~dens~~ dense, ensuring sufficient power flow density at ground level and sufficient capacity in the covered area. The first orthogonal plane can be the same as the second orthogonal plane. The number of antennas on the second concentric ring can be larger than the number of antennas on the first concentric ring. The horizontal angular range of the antennas on the second concentric ring can be smaller than the horizontal angular range of the antennas on the first concentric ring. The vertical aperture angle of the antennas on the first concentric ring can be in the range of 8 to 12 degrees, preferably 10 degrees. The vertical aperture angle of the antennas on the second concentric ring can be in the range of 3 to 6.5 degrees, preferably 5 degrees. Using these settings has the advantage that a relative uniform power flow density of -21dBm/square meter in the entire area to be covered can be achieved (assuming 10W transmitting power per sector). Another advantage is that on a mobile phone this would correspond to a level of -49dBm, which is adequate for indoor coverage as well.

Please replace the paragraph beginning on page 6, line 25 with the following amended paragraph:

_____The shape and/or size of one or more sectors can be changed by switching on or off one or more antennas, by changing the horizontal angular range of one or more antennas, or by changed by changing the vertical aperture angle of one or more antennas.

Please replace the paragraph beginning on page 7, line 1 with the following amended paragraph:

All antennas operate at one frequency. A conventional ~~bases~~ base station operating at a different frequency can be placed within the area for handling ~~local~~ locally high volumes of traffic.

Please replace the paragraph beginning on page 7, line 17 with the following amended paragraph:

~~Besides~~ Apart from the fact that the ~~presented~~ present invention enables coverage of an area of any size and/or shape (e.g. a whole town or a country) with the possibility to relatively easily change the capacity in the covered area, ~~there are also~~ the invention also possesses other advantages.

Please replace the paragraph beginning on page 7, line 22 with the following amended paragraph:

~~A big~~ One significant advantage of the invention is that a homogenous network (without interference problems due

to different propagation paths of different stations and path loss due to obstacles) can be ~~build~~ built, making it possible to achieve high transmission capacities in the individual sectors. Due to overlapping at the edges of sectors it is possible to compensate the loss of power with the aid of macrodiversity and a good soft handover can be achieved.

Please replace the paragraph beginning on page 7, line 30 through page 8, line 7 with the following amended paragraph:

Another advantage is that using a concentrated site, i.e. a high site from which a large area can be covered as ~~describes~~ described above, results in considerable savings in the fixed core network since fewer base stations need to be connected to the fixed core network. Other savings can be made in construction and maintenance time and costs, and in synergy from sharing extensive power supplies and cables. The construction of a base station at a concentrated site can be completed "overnight", resulting in a competitive advantage since an extensive and homogenous network without any gaps would be available immediately.

Please replace the paragraph beginning on page 8, line 15 with the following amended paragraph:

Fig. 2 shows a top plan view of a tower with two rings of antennas arranged ~~in concentric relation to~~ concentrically with respect to each other and in a sectorized arrangement.

Please replace the paragraph beginning on page 8, line 22 with the following amended paragraph:

For the purpose of teaching ~~of~~ the invention, preferred embodiments of the method and system of the invention are described in the sequel. It will be apparent to the person skilled in the art that other ~~alternative~~ alternatives and equivalent embodiments of the invention can be conceived and reduced to practice without departing from the true spirit of the invention, the scope of the invention being only limited by the claims as finally granted.

Please replace the paragraph beginning on page 8, line 31 through page 9, line 2 with the following amended paragraph:

A telecommunications radio system according to the invention makes it possible to cover a large area such as an entire town or a country from just one site with a ~~dens~~ dense sectorized system. This helps to avoid virtually all of the problems as described in the background section of this application.

Please replace the paragraph beginning on page 9, line 25 through page 10, line 10 with the following amended paragraph:

In this embodiment, in order to achieve sufficient power flow density at ground level and to obtain sufficient capacity in the covered area, sectorization has to be ~~dens~~ dense. This can be achieved by using two rings of antennas, the outer one being sectorized denser because of the higher

circular surface due to the quadratic increase of the surface with increasing distance. The inner ring would comprise 24 antennas defining 24 sectors, thus 15-degree horizontal angular range in each case. The outer ring would comprise 72 antennas defining 72 sectors, thus 5-degree horizontal angular range in each case. Antennas are used which are able to create small beams with high gain. The vertical aperture angle of the inner antennas should be 10 degrees and would cover a distance range of 1km - 3.2km at about 10 degrees tilt. The vertical aperture angle of the outer antennas should be 5 degrees and would cover a distance range of 3.2 km - 6.4 km at about 2.5 degrees tilt. In this configuration, each sector (from inside or outside antennas) covers an area of about 1.33 square km.

Please replace the paragraph beginning on page 10, line 11 with the following amended paragraph:

This would result in a relatively uniform power flow density of -21 dBm/square meter in the entire area to be covered (at 10 W transmitting power per sector). On a mobile phone (OdBi antenna), this would correspond to a level of -49 dBm (assuming line of sight). With this level it should also be possible to achieve an adequate indoor coverage. An advantage of the invention as used in the example is that a homogenous network (without interference problems due to different propagation paths of different stations and path loss due to obstacles) can be ~~build~~ built, thus making it possible to achieve high transmission capacities in the individual sectors. The number of sectors needed to cover all mobile devices with enough capacity depends on the size of the sectors and the required field strength. Due to

overlapping at the edges of sectors, it is possible to compensate the loss of power with the aid of macrodiversity and a good soft handover can be achieved. An individual ~~neighbourhood~~ neighborhood cell planning, something which is required in traditional mobile communications radio networks, can be replaced by simple systematics: a maximum of 7 ~~neighbours~~ neighbors for a sector from the internal ring; a minimum of 3 (and/or 4) ~~neighbours~~ neighbors for a sector from the outer ring.

Please replace the paragraph beginning on page 11, line 1 with the following amended paragraph:

In this embodiment, the system should use antennas all operating at only one frequency. This means that about 50,000 customers (10 applications per UMTS channel simultaneously, 96 sectors and 20mErl/customer each) would be conceivable, which should be sufficient for a UMTS network in the beginning.

Please replace the paragraph beginning on page 11, line 8 with the following amended paragraph:

Future capacity demands are safeguarded as well. Sectors can be shape shifted to change ~~its~~ their capacity by switching on or off antennas thus enabling or disabling entire sectors, or changing the horizontal angular range and/or the vertical aperture angle and/or the tilt of antennas. In case of particularly heavy traffic within a sector, the origin of this traffic can be determined very accurately since the angle as well and the distance (calculated from the time delay) are known. Consequently, a

UMTS site with a base station, which would serve this "hot spot" locally, could be build there at a second frequency other then the first frequency. The advantage would be that one would not have to make conjectures regarding the position of "hot spots", but that these can be determined quite specifically and that further base stations will then be build only there.

Please replace the paragraph beginning on page 11, line 25 through page 12, line 4 with the following amended paragraph:

By using a high site (high being defined as at least 50m from erection ground) and creating a large number of sectors it is possible to cover a large area for mobile telecommunications services. Because there is a clean signal between the antenna and a mobile device (the signal is clean because the base station is located at such a high site that there is no interference from buildings surrounding the mobile device and because there are no surrounding base stations interfering) and because of a high trunking gain (because of the high number of sectors the antennas use small beams with high gain), even in urban areas large areas can be covered from the base station on the high site.